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Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Baton Rouge Marketing Terminal
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 332
Activity Number: PER20090001
Proposed Permit Number: 0840-00127-V4

I. APPLICANT

Company:

ExxonMobil Refining and Supply Company PO Box 551 Baton Rouge, Louisiana 70821

Facility:

Baton Rouge Marketing Terminal 3329 Scenic Hwy
Baton Rouge, East Baton Rouge Parish, Louisiana
Approximate UTM coordinates are 675.736 kilometers East and 3374.700 kilometers North, Zone 15.

II. FACILITY AND CURRENT PERMIT STATUS

The ExxonMobil Baton Rouge Refining and Supply Company (BRRF) owns and operates a petroleum refinery in Baton Rouge, Louisiana. The Baton Rouge Marketing Terminal currently operates under Permit No. 0840-00127-V3 issued on May 13, 2008.

ExxonMobil Baton Rouge Refining and Supply Company (BRRF) - Baton Rouge Marketing Terminal is a designated Part 70 source.

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ExxonMobil Refining & Supply Company Baton Rouge Marketing Terminal Baton Rouge, East Baton Rouge Parish, Louisiana Agency Interest Number: 332

The facility submitted timely applications for initial Part 70 permits for other units in the facility, which continues to operate under the state permits listed below.

Permit No.	Unit or Source	Date Issued
2275-V2	Pipestills Complex	October 10, 2005
2385-V3	Catalytic Craking Complex	April 11, 2006
2447-V1	Hydroprocessing Complex	October 10, 2005
3060-V0	Hydrofining Unit	January 18, 2008
2261-VI	Reforming Complex	October 12, 2005
2176-V4	Low Sulfur Mogas Complex	July 15, 2009
2589-V3	Light Ends Complex	April 11, 2006
2234-V4	Coke Complex	December 9, 2008
2341-V1	Specialties Complex	August 29, 2007
2296-V3	Light Oils Finishing Unit	July 30, 2008
2300-V0	Sulfur Recovery Complex	March 20, 2006
2363-V2	Water Clarification Unit	November 5, 2008
2795-V4	Refinery Tank Farm August 7, 2009	
2047-V1	Docks	April 11, 2006
2926-V0	Complex Labs	August 31, 2005

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on March 31, 2009 requesting a Part 70 operating permit renewal/minor modification for the Marketing Terminal.

Description

The Baton Rouge Marketing Terminal is involved in sales and distribution of fuels such as motor gasoline (MOGAS), aviation gasoline (AVGAS), and distillate products (diesel and Jet A fuels). Gasoline additives are stored on site and mixed into gasoline during truck loading.

Bulk petroleum products are stored in multiple tanks, seven (7) with internal floating roofs. Pumps withdraw product from the tanks for transfer to a loading rack that serves six lanes. The sixth lane is dedicated to unloading trucks containing ethanol and sampling of trucks containing AVGAS. Motor and aviation gasoline vapors displaced during truck loading are routed to a Vapor Recovery Unit (VRU) (dual bed carbon adsorber/absorber). Liquid from an interface tank is transported via tank truck to the ExxonMobil Refinery as needed.

Emissions from loading operations are calculated on an intermittent basis because the VRU emits VOC even when trucks are not actively being loaded. The emission cycle is a function of the unit's regenerative design; hydrocarbon can be emitted when no loading is occurring.

A backup vapor combustion unit (VCU) allows loading at reduced rates when the VRU is not operational.

Tanks at the Baton Rouge Terminal #5005 are permitted under 'caps' to allow flexibility in product storage.

In this permit, BRRF requested a renewal/minor modification for the Terminal. There are no projects associated with this permit.

Minor changes and reconciliations are being incorporated into this permit as follows:

- Update the emissions for all sources based on updated emission factors, calculation methodology, and emission speciation.
- The requirements of the 40 CFR 61 Subpart FF are included for the underground Tank U1/U2.
- Emissions for PM₁₀ and SO₂ for the VCU are included.

The Loading Rack and VRU are separated into two separate sources.

Proposed Permit

Permit 0840-00127-V4 will be the renewal/modification of Part 70 operating permit 0840-00127-V3 for the Marketing Terminal.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>	
PM_{10}	_	0.24	+0.24	
SO_2	-	0.02	+0.02	
NO_X	1.66	1.66	-	
CO	4.15	4.16	+0.01	
VOC *	62.18	73.10	+10.92	

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note		
Entire Facility Baton Rouge Terminal	LAC 33:III.2107 - Control of Organic Compounds - Volatile Organic Compounds - Loading	DOES NOT APPLY. The facility is regulated under LAC 33:III.2135 and 2137.		
	40 CFR 68 - Chemical Accident Prevention and Minimization of Consequences	DOES NOT APPLY. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source.		
	40 CFR 63 Subpart EEEE - Benzene Waste Operations	APPLIES. The Baton Rouge Terminal is a part of petroleum refineries that is subject to the provisions of this subpart.		
	40 CFR 61 Subpart FF – Organic Liquid Distribution	APPLIES. The Baton Rouge Terminal is an OLD operation that is located next to a major source of HAP emission.		
	40 CFR 63 Subpart BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	DOES NOT APPLY. This facility is not an area source.		
	40 CFR 63 Subpart CCCCCC - Gasoline Dispensing Facilities	DOES NOT APPLY. The facility does not have any gasoline dispensing equipment.		
	LAC 33:III.51 - Comprehensive Toxic Air Pollutant Emission Control Program	APPLIES. The Baton Rouge Terminal is a major source of the regulated air pollutant.		
	LAC 33:III.2125 - Vapor Degreasers	EXEMPT. The facility does not meet the size requirement.		
BRT/LD Loading Truck Loading	40 CFR 63 Subpart EEEE - Organic Liquid Distribution	EXEMPT. The source is subject to a more stringent MACT.		
Fugitives BRT/FUG Baton Rouge Terminal Fugitives	40 CFR 63 Subpart CC - Petroleum Refinery	EXEMPT. It is not a petroleum refining process unit.		
	40 CFR 63 Subpart EEEE - Organic Liquid Distribution	EXEMPT. The source is subject to a more stringent MACT.		

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BRT/RACK Product Loading Rack	40 CFR 63 Subpart EEEE – Organic Liquid Distribution	EXEMPT. The source is subject to the more stringent MACT.
	40 CFR 60 Subpart XX - Standards for Performance for Bulk Gasoline Terminals	APPLIES. The existing loading is equipped with a vapor recovery unit.
	40 CFR 63 Subpart R – Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	APPLIES. The source is a loading rack subject to this subpart.
TK-01, 02, 04, 05, 06 Motor Gasoline Storage Tank	40 CFR 60 Subpart A – General Provisions	DOES NOT APPLY. The source is not subject to the provisions of any standard of this part.
	40 CFR 60 Subpart K – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to June 11, 1973.
·	40 CFR 60, Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to May 19, 1978.
	40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to July 23, 1984.
	40 CFR 63 Subpart EEEE – Organic Liquid Distribution	DOES NOT APPLY. The tank stores organic liquid excluded for purposes of this Subpart.
TK-03, 07, 10, 11, 21 Distillate Storage Tank	LAC 33:III.2103 - Storage of Volatile Organic Compounds	DOES NOT APPLY. The TVP is less than 1.5 psia.
	40 CFR 60 Subpart A – General Provisions	DOES NOT APPLY. The source is not subject to the provisions of any standard of this part.
	40 CFR 60 Subpart K – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to June 11, 1973.
	40 CFR 60 Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	
	40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to July 23, 1984.
	40 CFR 63 Subpart EEEE – Organic Liquid Distribution	DOES NOT APPLY. The tank stores organic liquid excluded for purposes

[of this Subpart.
	40 CFR 63 Subpart R - Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	DOES NOT APPLY. The tank is not a gasoline tank.
TK-09 Aviation Gasoline Storage Tank	40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The tank was constructed/modified or reconstructed after May 19, 1978.
	40 CFR 60 Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The tank was constructed/modified or reconstructed after July 23, 1984.
	40 CFR 60 Subpart Kb – Standards of Performance for Storage Vessels for Petroleum Liquids	APPLIES. The tank was constructed/modified or reconstructed after July 23, 1984.
	40 CFR 63 Subpart EEEE – Organic Liquid Distribution	DOES NOT APPLY. The tank stores organic liquid excluded for purposes of this Subpart.
	40 CFR 63 Subpart R – Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	APPLIES. The tank is a gasoline tank that is subject to the provisions of this subpart.
TK-12 Gasoline Storage Tank	40 CFR 60 Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to May 19, 1978.
	40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels	DOES NOT APPLY. The tank was constructed/modified or reconstructed prior to July 23, 1984.
	40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	APPLIES. The tank was constructed/modified or reconstructed prior to May 19, 1978.
	40 CFR 63 Subpart EEEE – Organic Liquid Distribution	DOES NOT APPLY. The tank stores organic liquid excluded for purposes of this Subpart.
TK-18 Additive Storage Tank	LAC 33:III.2103 - Storage of Volatile Organic Compounds	DOES NOT APPLY. The TVP is less than 1.5 psia.
	40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The storage capacity is less than 40,000 gallons.
	40 CFR 60, Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The storage capacity is less than 40,000 gallons.

		
	40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels	DOES NOT APPLY. The storage capacity is less than 19,812 gallons and TVP is less than 0.5 psia.
Tank U3 Oil/Water Separator LAC 33:III.2109 - Control of C Compounds - Oil/Water Separation		EXEMPT. This source is a single or multiple compartment VOC/water separator which separates less than 200 gallons a day of materials containing volatile organic compounds.
	40 CFR 63 Subpart EEEE – Organic Liquid Distribution	EXEMPT. The tank is used to conduct changeovers to organic liquid excluded for purposes of this Subpart.
Tank U1, U2 Underground Sump Tank	40 CFR 60 Subpart A – General Provisions	DOES NOT APPLY. The source is not subject to the provisions of any standard of this part.
	40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The storage capacity is less than 40,000 gallons.
	40 CFR 60 Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	DOES NOT APPLY. The storage capacity is less than 40,000 gallons.
	40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels	DOES NOT APPLY. The storage capacity is less than 40,000 gallons.
	40 CFR 63 Subpart Y - Benzene Emissions from Benzene Storage Vessels.	DOES NOT APPLY. The vessel does not store benzene.
40 CFR 64 - Compliance Assurance Monitoring for Major Stationary Sources		EXEMPT. CAM requirements do not apply to NSPS, NESHAP or MACT standards proposed after November 15, 1990. The source is subject to 40 CFR 61, Subpart FF.
	40 CFR 63 Subpart EEEE - Organic Liquid Distribution	EXEMPT. The tank is used to conduct changeovers to organic liquid excluded for purposes of this Subpart.
	40 CFR 61 Subpart FF - Benzene Waste Operations	APPLIES. The terminal sump tanks are equipped with a closed vent system. Emissions are routed to a carbon adsorption system.

VCU Vapor Combustion Unit	Distribution	Facilities	(Bulk	Gasoline	APPLIES. The unit is a thermal oxidation system that is subject to the
	Terminals and	Pipeline Br	reakout Si	tations)	provisions of this subpart.

Prevention of Significant Deterioration/Nonattainment Review

The permit does not authorize any construction. Therefore, PSD and NNSR do not apply.

Streamlined Equipment Leak Monitoring Program

Terminal is subject to 40 CFR 63 Subpart R and Subpart XX for equipment also.

MACT Requirements

The facility meets MACT requirement by complying with the 40 CFR 63 Subpart R for the loading racks and fugitives. The permit requires compliance with the appropriate MACT requirements.

Air Quality Analysis

Emissions associated with the proposed renewal/modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

A permit shield was not requested.

VI. PERIODIC MONITORING

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permits.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III. Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

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Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) - An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.